We claim:

1   **1.** A method for determining a location of a Bluetooth enabled mobile device, the

2   method comprising the steps of:

3   broadcasting, from the Bluetooth enabled mobile device, a message to a plurality

4   of mobile devices;

5   determining if a predetermined minimum number of responses to the broadcasted

6   message are received from the plurality of mobile devices, and if so, synchronizing the

7   Bluetooth enabled mobile device with at least three mobile devices of the plurality of

8   mobile devices responding to the message; and

9   calculating the location of the Bluetooth enabled mobile device as a function of

10   the respective locations of the synchronized at least three mobile devices.

1   **2.** The method of claim 1 further comprising the step of:

2   storing, in the Bluetooth enabled mobile device, the location of the Bluetooth

3   enabled mobile device.

1   **3.** The method of claim 1 wherein each of the at least three mobile devices is

2   Bluetooth enabled.

1   **4.** The method of claim 3 wherein the calculating the location is performed

2   independent from any communications network associated with the Bluetooth enabled

3   mobile device or the plurality of mobile devices, and independent from any separate

4   location identification system.

1   **5.** The method of claim 4 wherein the Bluetooth enabled mobile device is a

2   cellular telephone, the communications network is a cellular communications network

3   and the separate location identification system is a GPS.

1   **6.** The method of claim 3 wherein the predetermined number of responses is three,

2   and only those particular mobile devices of the plurality of mobile devices having current

3   knowledge of their respective location respond to the message.

1   **7.** The method of claim 5 wherein the broadcasting the message is initiated upon

2   receipt of an incoming message to the Bluetooth enabled mobile device.

1   **8.** The method of claim 4 wherein the calculating the location step employs a

2   plurality of clock skews to calculate the location of the Bluetooth enabled mobile device.

1   **9.** A mobile communications apparatus, the apparatus comprising:

2   a Bluetooth transceiver;

3   a memory storing a location application, the location application having at least a

4   plurality of program instructions; and

5   a processor for executing the plurality of program instructions and for controlling

6   the operation of the mobile communications apparatus in accordance with the functions

7   defined by the plurality of program instructions, the plurality of program instructions

8   defining the steps of:

9   (i) broadcasting, through the Bluetooth transceiver, a message to a

10   plurality of mobile communications devices;

11   (ii) determining if at least three responses to the broadcasted message are

12   received, by the Bluetooth transceiver, from the plurality of mobile communications

13   devices, and if so, synchronizing, through the Bluetooth transceiver, the mobile

14   communications apparatus with at least three mobile communications devices of the

15   plurality of mobile communications devices responding to the message; and

16   (iii) calculating the location of the mobile communications apparatus as a

17   function of a respective location of each of the synchronized mobile communications

18   devices.

1   **10**. The mobile communications apparatus of claim 9 wherein the location of the
2   mobile communications apparatus is stored in the memory.

1   **11**. The mobile communications apparatus of claim 10 wherein the calculating the
2   location of the mobile communications apparatus is performed independent from any
3   communications network associated with the mobile communications apparatus or the
4   synchronized mobile communications devices, and independent from any separate
5   location identification system.

1   **12**. The mobile communications apparatus of claim 11 wherein the mobile
2   communications apparatus is a cellular telephone or PDA.

1   **13**. The mobile communications apparatus of claim 10 wherein only those
2   particular mobile communications devices of the plurality of mobile communications
3   devices having current knowledge of their respective location respond to the message,
4   and the calculating the location is determined as a function of a plurality of clock skews
5   between the at least three mobile communications devices and the mobile
6   communications apparatus.

1   **14**. A Bluetooth transceiver comprising:
2   means for broadcasting a message to a plurality of mobile communications
3   devices;
4   means for determining if at least three responses to the broadcasted message are
5   received from the plurality of mobile communications devices, and if so, means for
6   synchronizing a particular Bluetooth enabled mobile communications device associated
7   with the Bluetooth transceiver with at least three mobile communications devices of the
8   plurality of mobile communications devices responding to the message; and
9   means for calculating the location of the particular Bluetooth enabled mobile
10   device as a function of the respective locations of the synchronized at least three mobile
11   communications devices.

1   **15**. The Bluetooth transceiver of claim 14 wherein the means for calculating the

2   location of the mobile communications apparatus is performed independent from any

3   communications network associated with the particular Bluetooth enabled mobile

4   communications device or the synchronized mobile communications devices, and

5   independent from any separate location identification system.

1   **16**. The Bluetooth transceiver of claim 15 wherein the Bluetooth enabled mobile

2   communications device is a cellular telephone, the communications network is a cellular

3   communications network and the separate location identification system is a GPS.

1   **17**. The Bluetooth transceiver of claim 16 wherein only those particular mobile

2   communications devices of the plurality of mobile communications devices having

3   current knowledge of their respective location respond to the message.